

REMARKS

Reconsideration of this application as amended is respectfully requested. Claims 4, 5 and 25 have been amended. Claims 1-32 are in this application and are presented for the Examiner's consideration in view of the following comments.

With respect to the claims, the Examiner has objected to claims 4, 5 and 25. In the interests of furthering prosecution, Applicants have amended claims 4, 5 and 25 to remove the basis for the Examiner's objection. In particular, with respect to claims 4 and 25, the phrases "on the one hand" and "on the other hand" have been deleted. With respect to claim 5, the phrase "and possible interpolation on the basis of these curves" has been deleted and the word "derived" has been substituted for the word "built." Applicants submit that the word "derived" references use of the curves themselves either directly or indirectly, e.g., via interpolation (e.g., see Applicants' specification, p. 11, Ins. 6-20).

In view of the above-described amendments to claims 4, 5 and 25, Applicants note that claims 4-7, 10, 12-23, 25 and 29-32 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

Referring now to the prior art rejections, claims 1, 2, 24 and 28 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,748,761 issued May 5, 1998 to Chang et al. (*Chang*) in view of U.S. Patent No. 5,701,163 issued December 23, 1997 to Richards et al. (*Richards*). Applicants respectfully disagree.

Turning first to *Chang*, this reference describes an improved method for estimating motion for use in a low bit-rate encoding system. (*Chang*, col. 1, Ins. 25-27; col. 2, Ins. 1-5.) In particular, the apparatus and method of *Chang* exactly segments the image according to the moving objects therein and then provides a set of motion parameters for use in low bit-rate encoding. (*Chang*, col. 1, ln. 65; FIG. 1, output signal from element 104.)

Turning next to *Richards*, this reference provides a method for blurring images. (*Richards*, col. 1, Ins. 57-60.) As described in *Richards*, an image is filtered as a

function of pixel velocity and shutter characteristics. (*Richards*, col. 5, lns. 51-53; col. 6, lns. 12-14.)

Notwithstanding the above-cited references, Applicants respectfully submit that Applicants' claims 1, 2, 24 and 28 are patentable over *Chang* and *Richards*.

At the outset, Applicants' respectfully submit that there is no motivation to modify *Chang* as asserted by the Examiner. In particular, the Examiner's statement that *Chang* provides a method of evaluating the quality of coded images misses the mark. As noted above, *Chang* describes a process that is used in producing a coded image. (*Chang*, col. 1, lns. 25-27; col. 2, lns. 1-5.) Nowhere does the apparatus and method of *Chang* operate on the coded image to evaluate its quality. As such, since *Chang* lacks any description or suggestion of evaluating the quality of a coded image, Applicants submit that there is no reason why one skilled in the art would now modify *Chang* in view of *Richards* to yield Applicants' claimed invention.

Notwithstanding the above, the combination of *Chang* and *Richards* does not yield Applicants' claimed invention for any one of the following reasons.

First, as noted above, *Chang* does not evaluate the quality of the coded image and *Richards* blurs the image. As such, any modification of *Chang* by *Richards* merely results in a different set of motion vectors that blur the image. These motion vectors are then used to produce the coded image — not to evaluate the quality of the coded image.

Second, the Examiner has not identified each and every requirement of Applicants' claimed invention. In particular, the Examiner's statement that *Chang* discloses Applicants' claimed step of "processing a signal representative of an image so as to obtain a processed signal" is overbroad and vague. The Examiner's citation of FIG. 1, col. 1, lns. 62-67, and col. 3, lns. 1-3 of *Chang* is of no help. **What signal in *Chang* corresponds to Applicants' claimed processed signal?** Is it the output signal of change detector 100 of *Chang*? Is it the output signal of motion estimator 102 of *Chang*? Is it the output of motion vector field detector 103 of *Chang*? Is it the output signal of seed block detection & region growing circuit 104 of *Chang*? Simply because *Chang* describes a number of signals does not shift the burden to Applicants to make the Examiner's case. In view of the above, Applicants' respectfully traverse the

rejection since the Examiner has not identified what signal in *Chang* corresponds to Applicants' claimed processed signal.

Finally, even assuming the Examiner identifies what signal in *Chang* corresponds to Applicants' claimed processed signal, Applicants' independent claims 1 and 24 require psychovisual filtering of the processed signal. (For example, see Applicants' specification p. 1, lns. 13-17, p. 11, lns. 6-20; FIG. 3.) As noted above, *Richards* describes filtering as a function of pixel velocity and shutter characteristics. (*Richards*, col. 5, lns. 51-53; col. 6, lns. 12-14.) Applicants' fail to see how pixel velocity and the characteristics of a camera shutter as described in *Richards* represent psychovisual characteristics of human vision. Indeed, the Examiner should note that nowhere does *Richards* even describe or suggest the use of spatial frequencies. As such, the Examiner's assertion that *Richards* describes psychovisual filtering is simply wrong. In a similar fashion to *Richards*, nowhere does *Chang* describe psychovisual filtering. As such, Applicants respectfully submit that the requirement of psychovisual filtering as found in Applicants' claims 1 and 24 is nowhere to be found either in *Chang* or *Richards* whether considered singly or in combination.

In view of the above, Applicants respectfully submit that independent claims 1 and 24 are patentable over *Chang* in view of *Richards*. As such, respective dependent claims 2 and 28 are also in condition for allowance.

Claims 3 and 11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Chang* in view of *Richards* and further in view of U.S. Patent No. 6,674,911 issued January 6, 2004 to Pearlman et al. (*Pearlman-1*). Applicants respectfully traverse for the reasons described above with respect to Applicants' claim 1.

In addition, Applicants respectfully note that the filing date of *Pearlman-1*, September 25, 2002, is after Applicants' priority date of March 8, 1999. As such, *Pearlman-1* is not available as prior art. While Applicants do note that *Pearlman-1* is a **continuation-in-part** of U.S. Patent Application No. 09/093,076, filed June 8, 1998 (*Pearlman-2*), the Examiner has made no showing that *Pearlman-1* is entitled to the earlier filing date of *Pearlman-2*.

Claims 8, 26 and 27 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Chang* in view of *Richards* and further in view of U.S. Patent No. 5,937,097 issued August 10, 1999 to Lennon (*Lennon*). Applicants respectfully traverse for the reasons described above with respect to Applicants' claims 1 and 24.

Claim 9 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Chang* in view of *Richards* and *Lennon* and further in view of U.S. Patent No. 6,271,825 issued August 7, 2001 to Greene et al. (*Greene*). Applicants respectfully traverse for the reasons described above with respect to Applicants' claim 1.

Finally, with respect to the prior art made of record and not relied on, Applicants do not believe that U.S. Patent No. 6,735,253, issued May 11, 2004 to Chang et al. is available as prior art under 35 U.S.C. § 102(e) since the § 371(c)(1), (2) and (4) date is March 14, 2000, which is after Applicants' priority date of March 8, 1999.

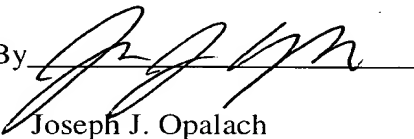
As it is believed that all of the objections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that the Examiner telephone Applicants' attorney in order to overcome any additional objections that the Examiner might have.

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PF990005

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 07-0832 therefor.

Respectfully submitted
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